



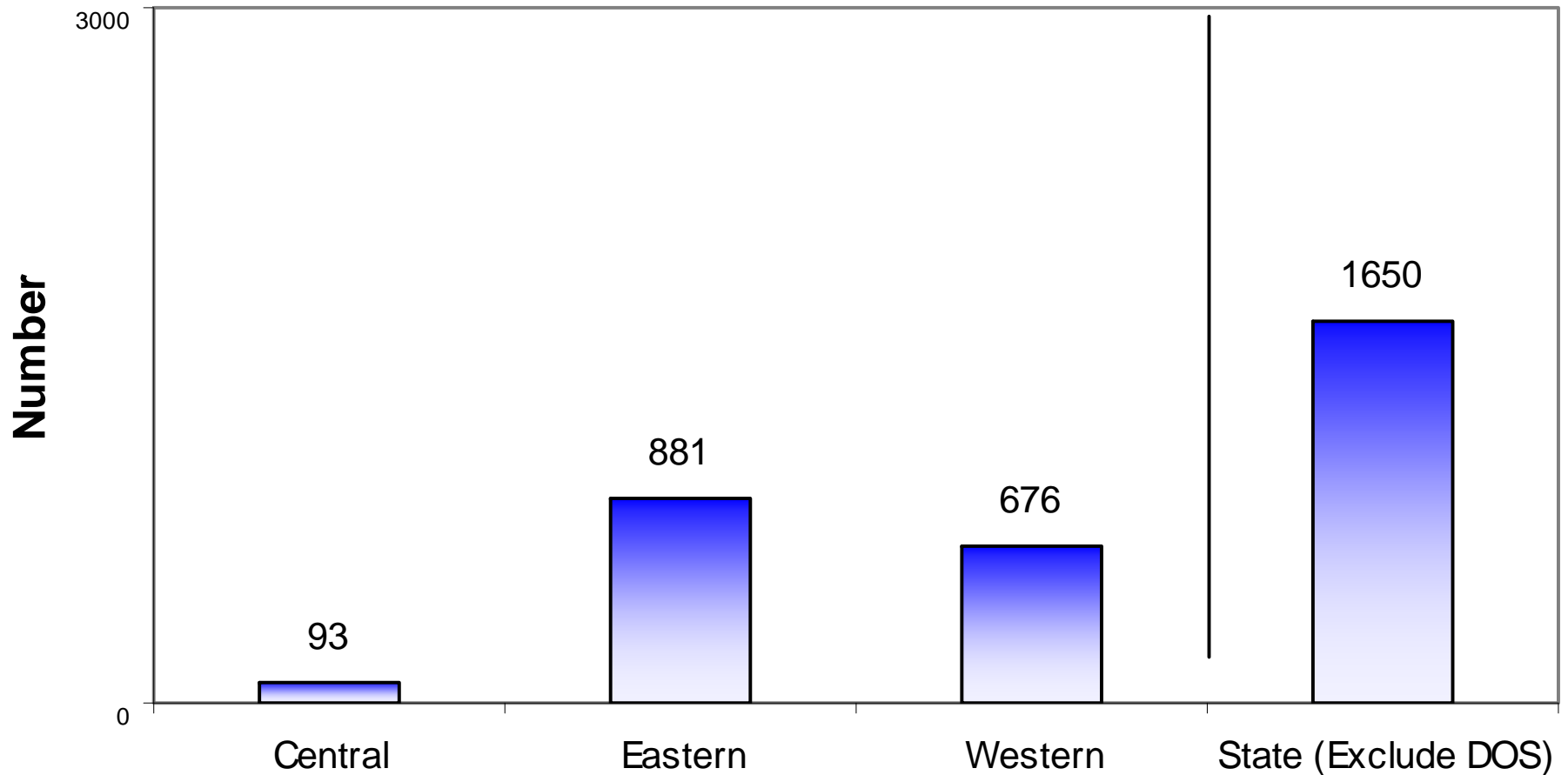
State Trauma Care Committee Report

January 1 – June 30, 2007

N = 1650

MT STCC 1st, 2nd & 3rd Qtrs 2007

Total Patients



N = 1650

MT STCC 1st, 2nd & 3rd Qtrs 2007



Central Region Facilities

| | |
|----------------------------------------------------|----|
| White Sulphur Springs - Mountainview Med. Ctr. MAF | 6 |
| Havre - Northern Montana Hospital | 9 |
| Choteau - Teton Medical Center MAF | 8 |
| Conrad - Pondera Medical Center | 27 |
| Chester - Liberty County Hospital | 2 |
| Helena - St. Peter's Hospital | 40 |
| Total | 92 |

Eastern Region Facilities

| | |
|---------------------------------------------------|-----|
| Livingston Memorial Hospital | 24 |
| Roundup Memorial Hospital | 6 |
| Culbertson - Roosevelt Memorial Hospital | 5 |
| Harlowton - Wheatland Memorial Hospital | 16 |
| Red Lodge - Beartooth Hospital & Health Center | 15 |
| Plentywood - Sheridan Memorial Hospital | 2 |
| Sidney Health Center | 14 |
| Wolf Point - Northeast Montana Health Services | 15 |
| Poplar - Northeast Montana Health Services | 13 |
| Glasgow - Frances Mahon Deaconess Hospital | 9 |
| Big Timber - Sweet Grass Community Hospital | 9 |
| Bozeman Deaconess Hospital | 101 |
| Billings - Deaconess - Billings Clinic | 294 |
| Billings - Saint Vincent Hospital & Health Center | 348 |
| Colstrip Medical Clinic | 11 |
| Total | 882 |

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MT STCC 1st, 2nd & 3rd Qtrs 2007



Western Region Facilities

| | |
|-------------------------------------------|-----|
| Plains - Clark Fork Valley Hospital | 7 |
| Polson - St. Joseph Hospital | 10 |
| Anaconda - Community Hospital of Anaconda | 25 |
| Hamilton - Marcus Daly Memorial Hospital | 17 |
| Dillon - Barrett Hospital | 17 |
| Superior - Mineral County Hospital | 43 |
| Ronan - St. Luke Community Hospital | 28 |
| Whitefish - North Valley Hospital | 10 |
| Kalispell Regional Hospital | 122 |
| Missoula - Community Medical Center | 21 |
| Butte - St. James Community Hospital | 92 |
| Missoula - St. Patrick Hospital | 284 |
| Total | 676 |

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MT STCC 1st, 2nd & 3rd Qtrs 2007

First-third Quarter Data Missing

- Central: Benefis

St. Peter's Hospital/partial

- Western- Kalispell Regional/partial
CMC/partial

Additional Registry Facilities

- Beartooth Hospital, Red Lodge
- Big Sandy Medical Center
- Daniels Memorial, Scobey
- Roosevelt Medical Center, Culbertson
- Broadwater Health Center, Townsend
- Granite County, Phillipsburg
- Big Horn Memorial, Hardin
- McCone County, Circle
- Missouri River, Fort Benton
- Central Montana Medical, Lewistown
- Ruby Valley, Sheridan



Additional Registry Facilities

- Powell County, Deer Lodge
- Prairie Community, Terry
- Madison Valley, Ennis
- Fallon Medical Center, Baker
- Powder River, Broadus
- Dahl Memorial, Ekalaka
- Northern Rockies, Cutbank
- Rosebud Health Center, Forsyth
- Holy Rosary, Miles City
- Phillips County, Malta


Patient YTD Demographics

N = 1650

82% ages 10-64 5% < 10 13% ≥ 65

81% White 11% Native 5% ND

67% Male 33% Female



1st-2nd Quarter Patient YTD

Demographics N = 1014

92% Blunt 6% Penetrating

37% MVC 7% Horse

20% Falls

13% MC

4% Assault 2% Pedestrian

2 % Bicycle

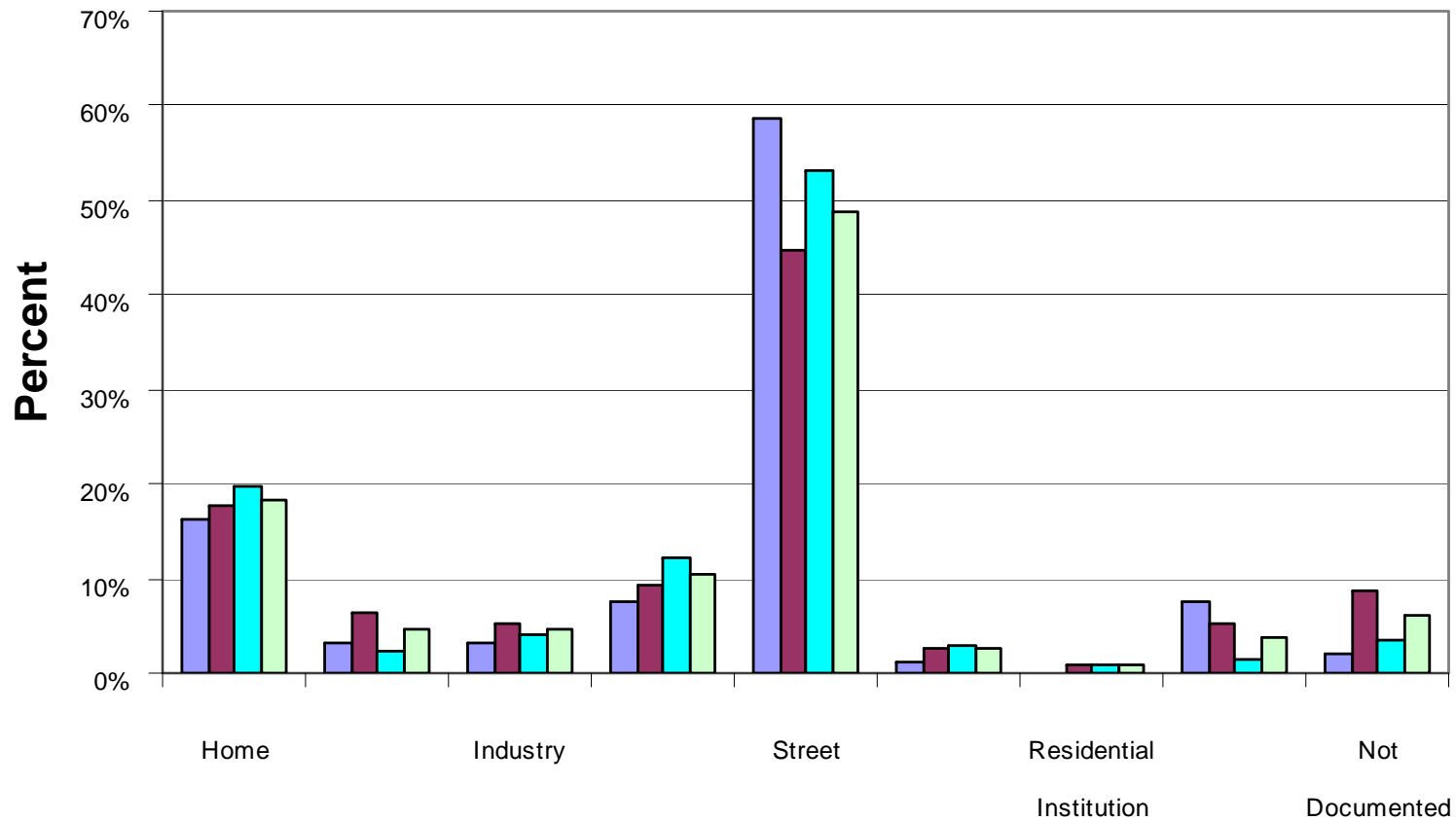
49% Street/Highway

18% Home

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MT STCC 1st, 2nd & 3rd Qtrs 2007

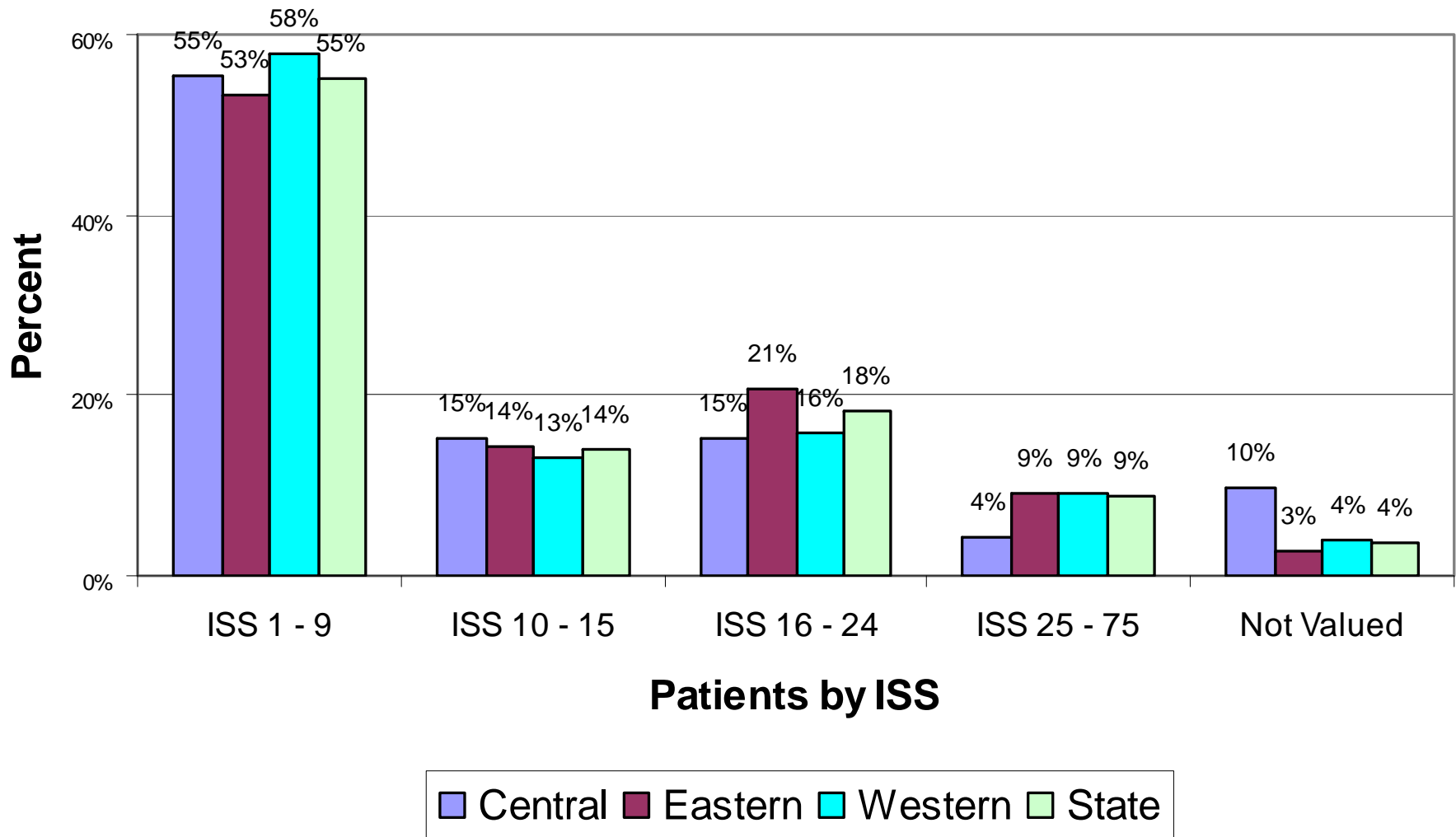
Location by Region Comparison



Central Eastern Western State

N = 1650

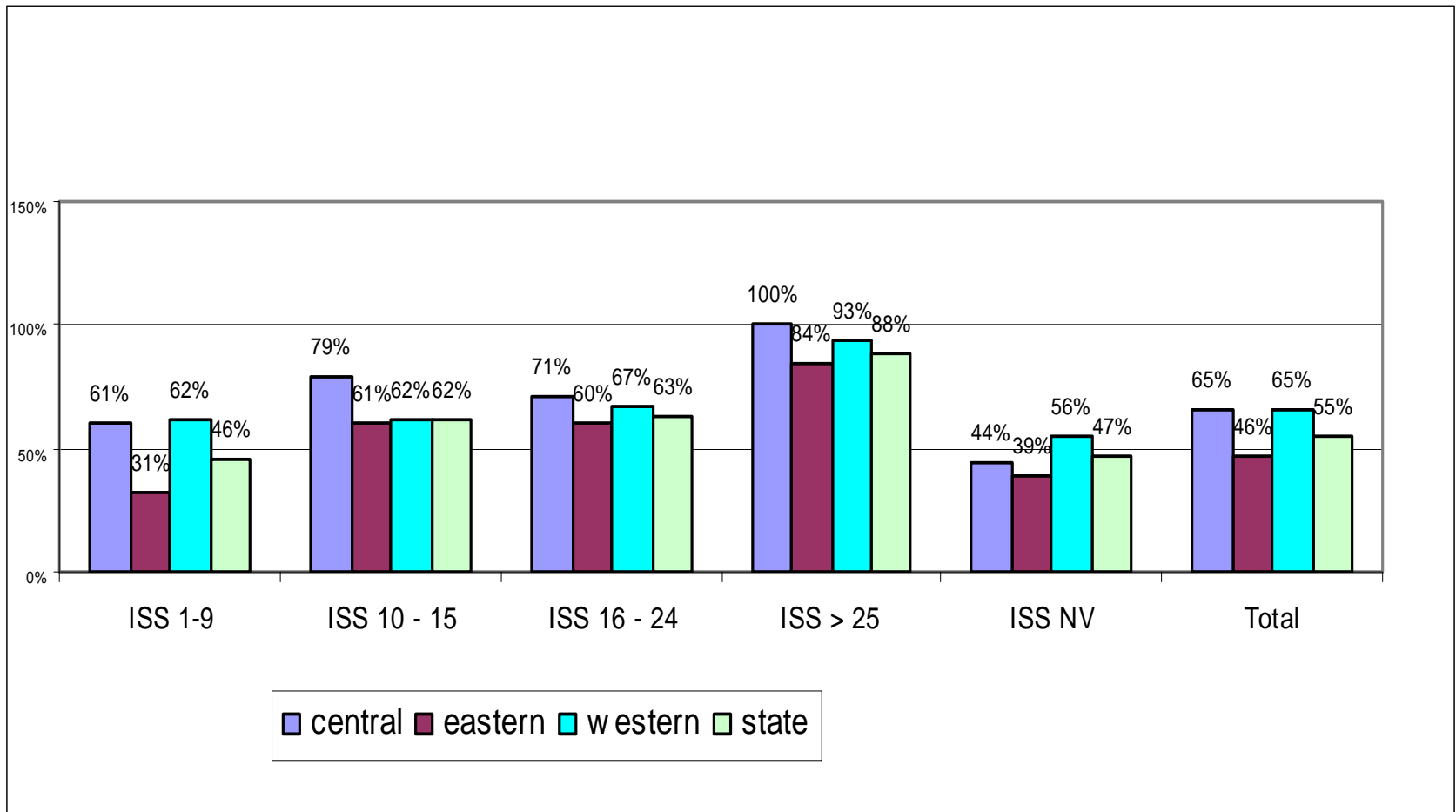
MT STCC 1st, 2nd & 3rd Qtrs 2007



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MT STCC 1st, 2nd & 3rd Qtrs 2007

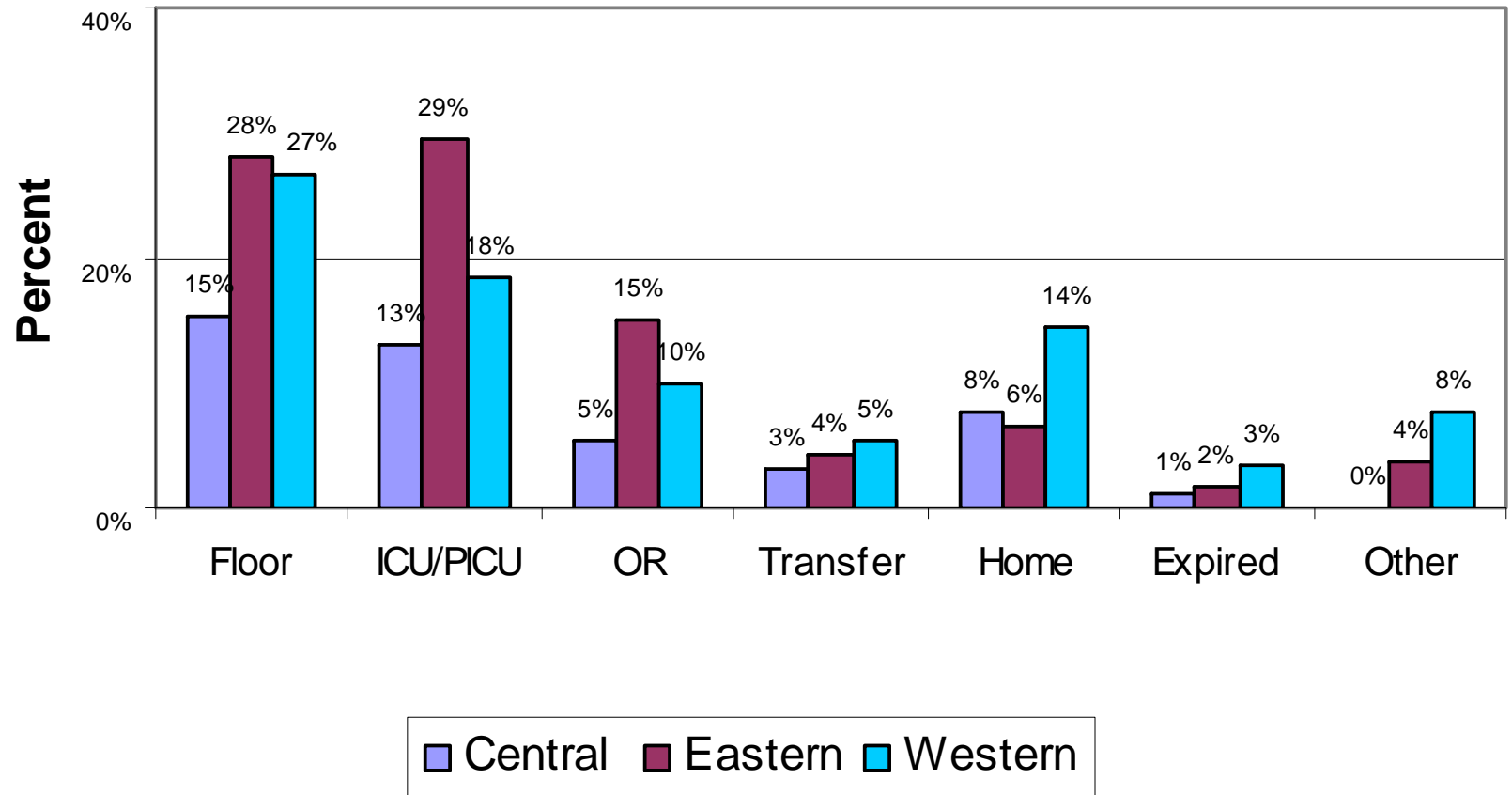
Trauma Team Activation (Full or Partial) by ISS



N = 1650

MT STCC 1st, 2nd & 3rd Qtrs 2007

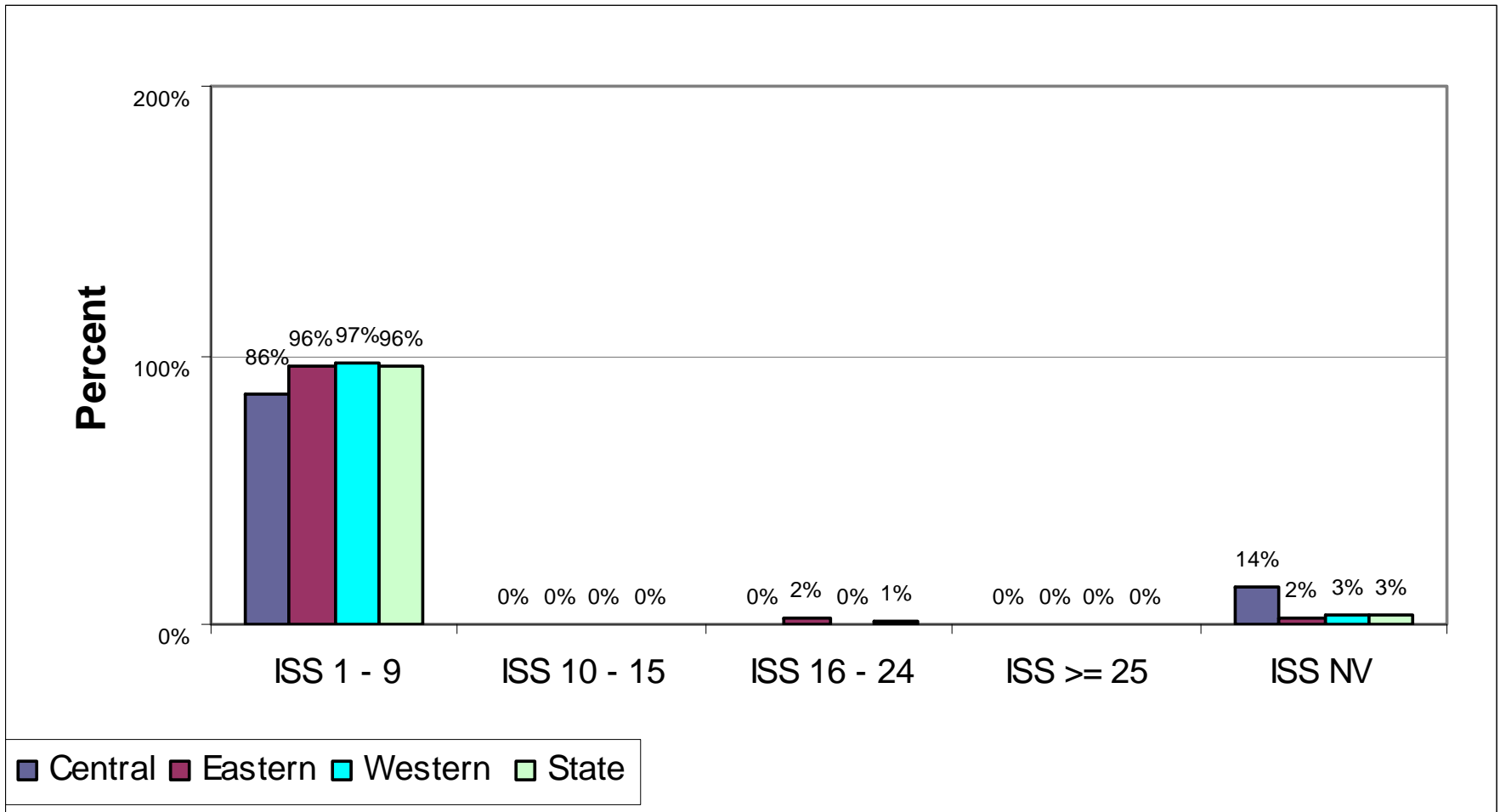
ED Disposition



N = 1650

MT STCC 1st, 2nd & 3rd Qtrs 2007

ED to Home by ISS

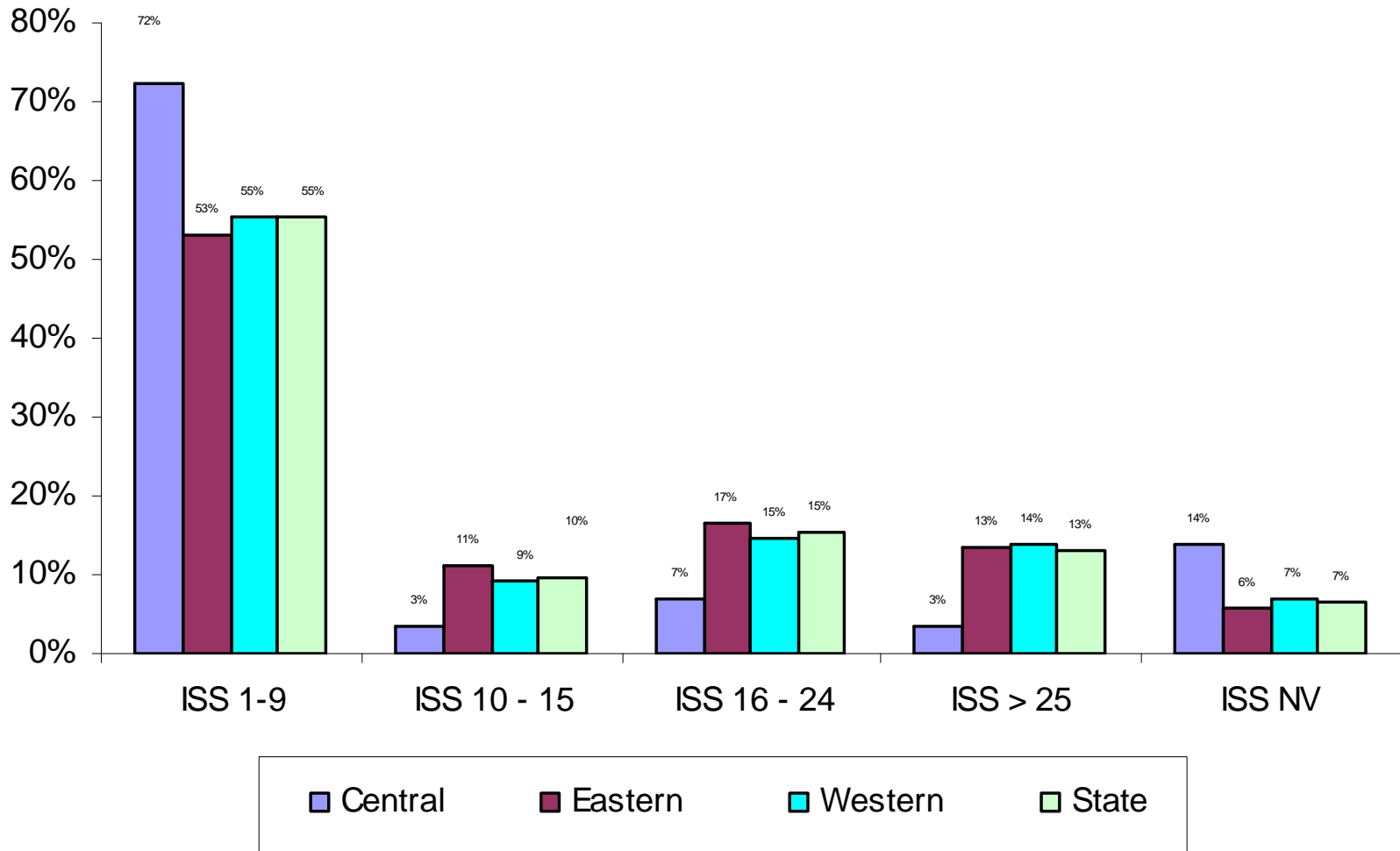


N = 1650

MT STCC 1st, 2nd & 3rd Qtrs 2007

STATE

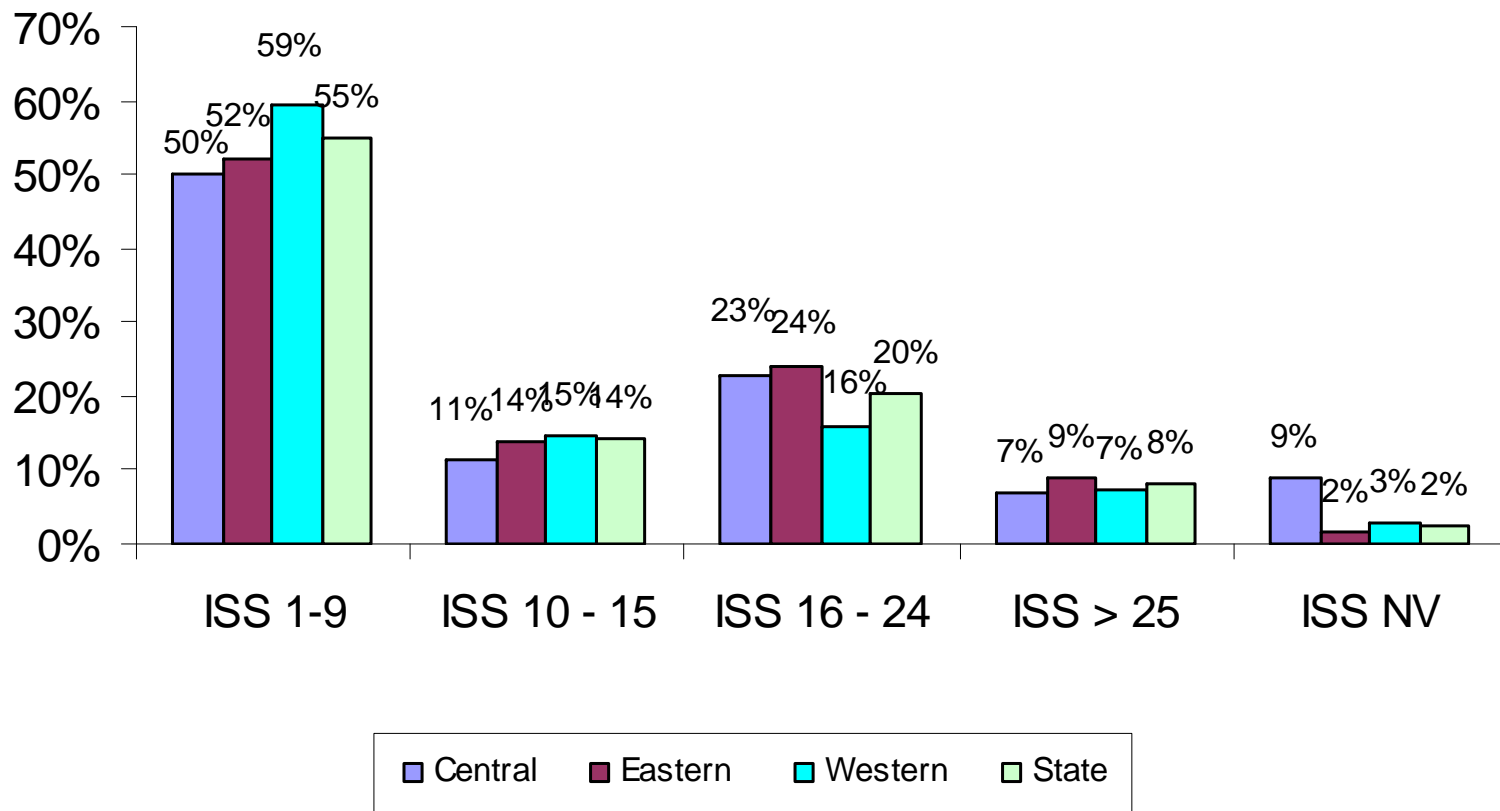
ED LOS: Less than 120 Minutes



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MT STCC 1st, 2nd & 3rd Qtrs 2007

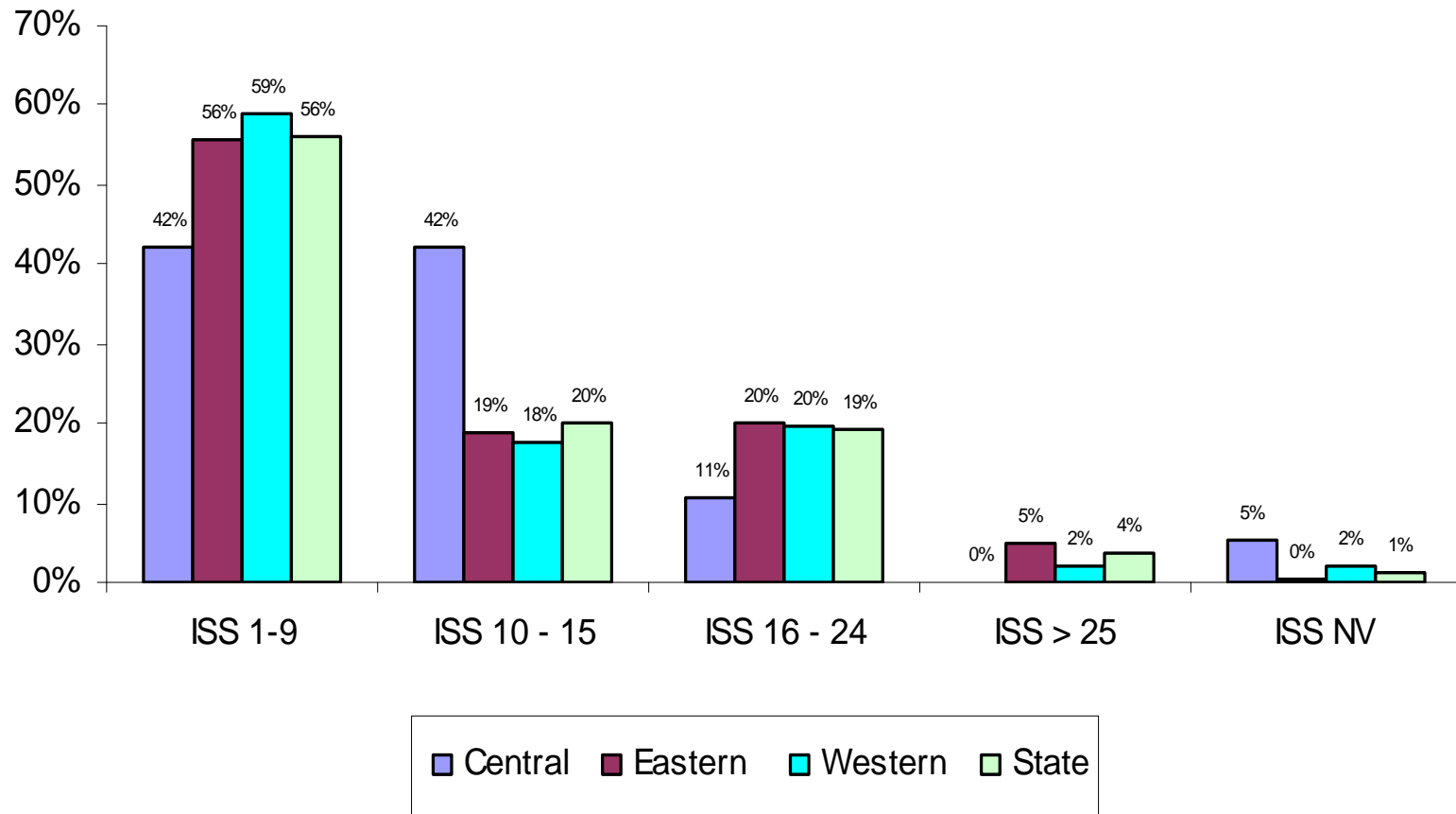
STATE ED LOS: 120 - 239 Minutes



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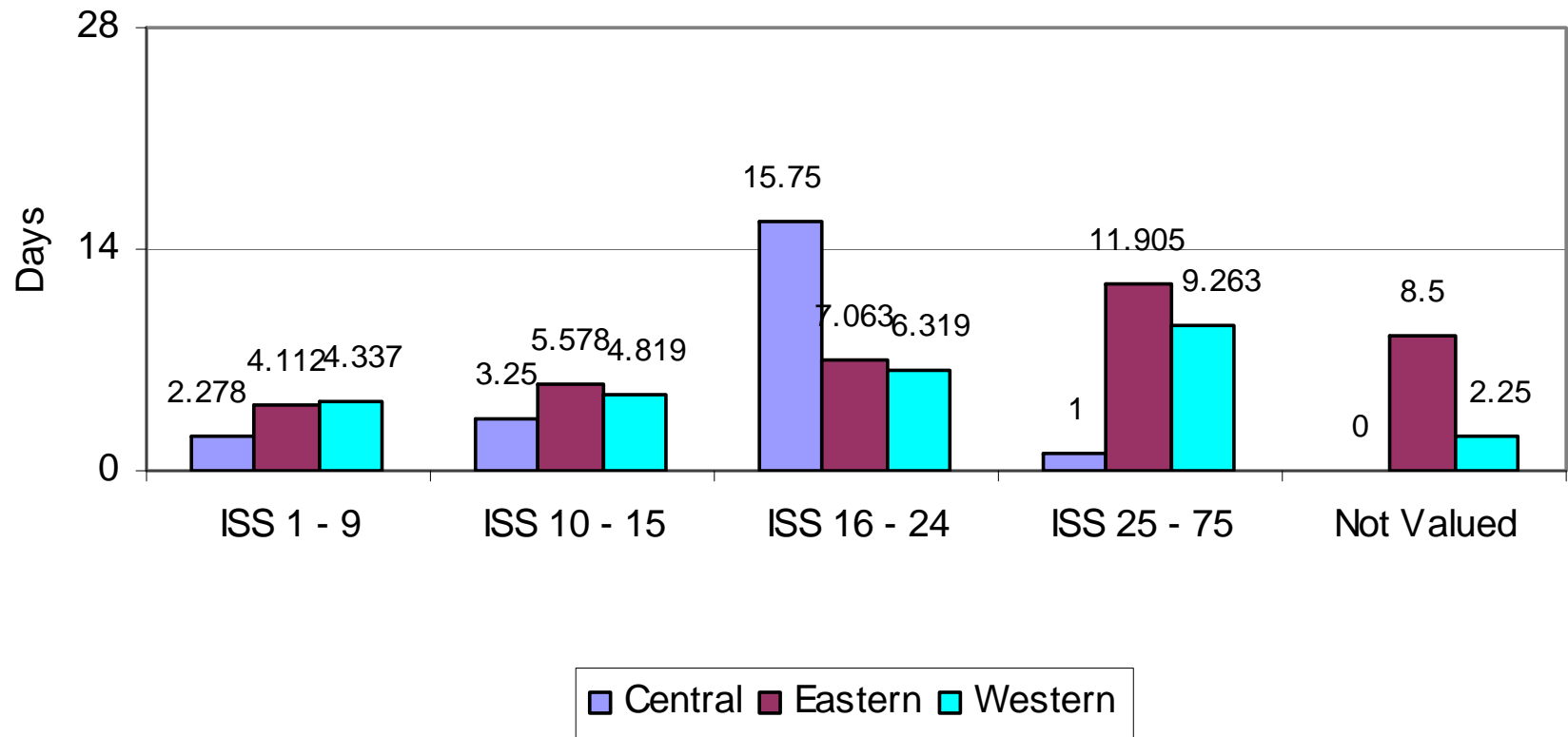
STATE ED LOS: >239 Minutes



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MT STCC 1st, 2nd & 3rd Qtrs 2007

Avg. Hospital LOS by Region

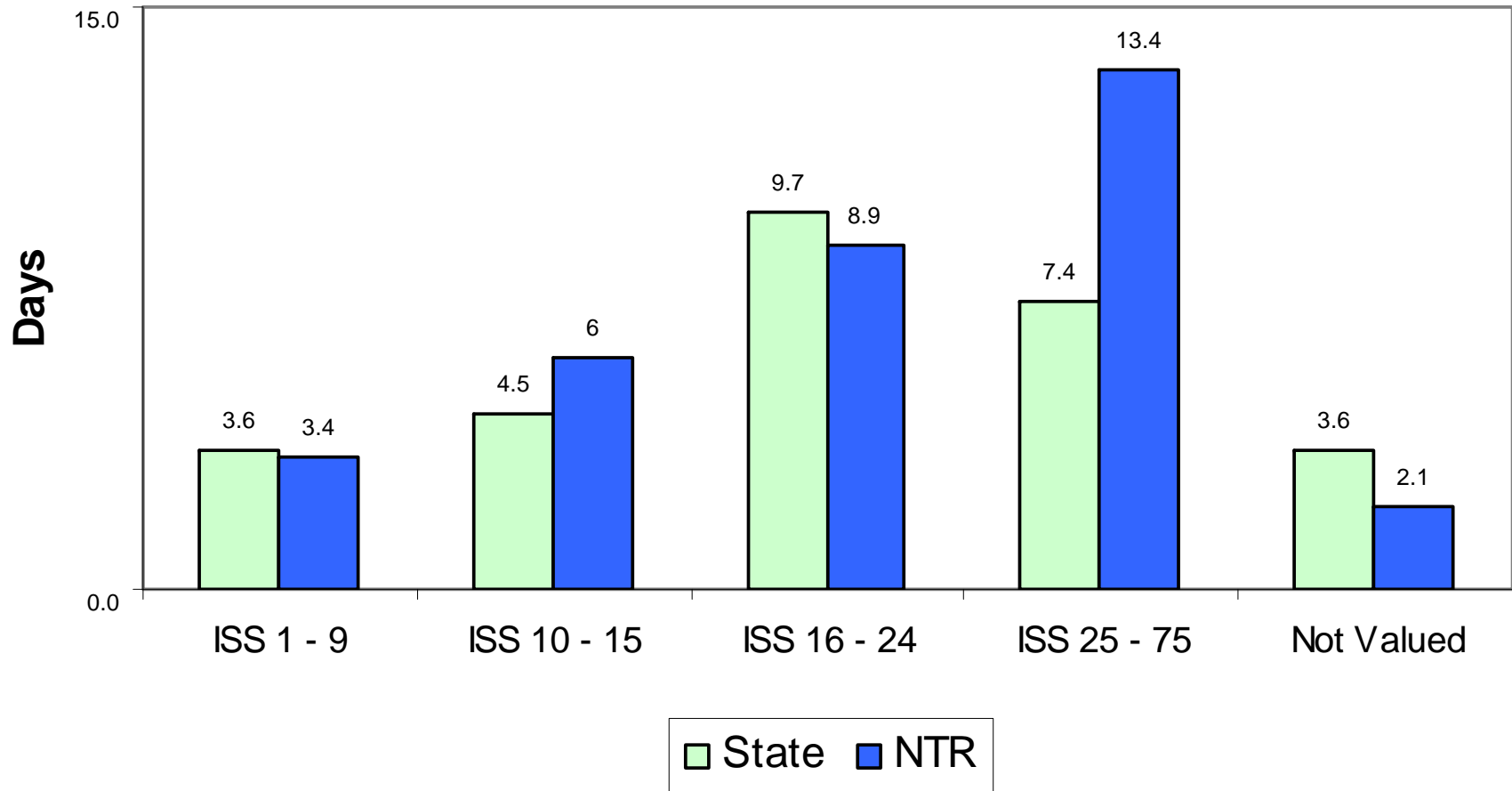


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MT STCC 1st, 2nd & 3rd Qtrs 2007

Avg. Hospital LOS

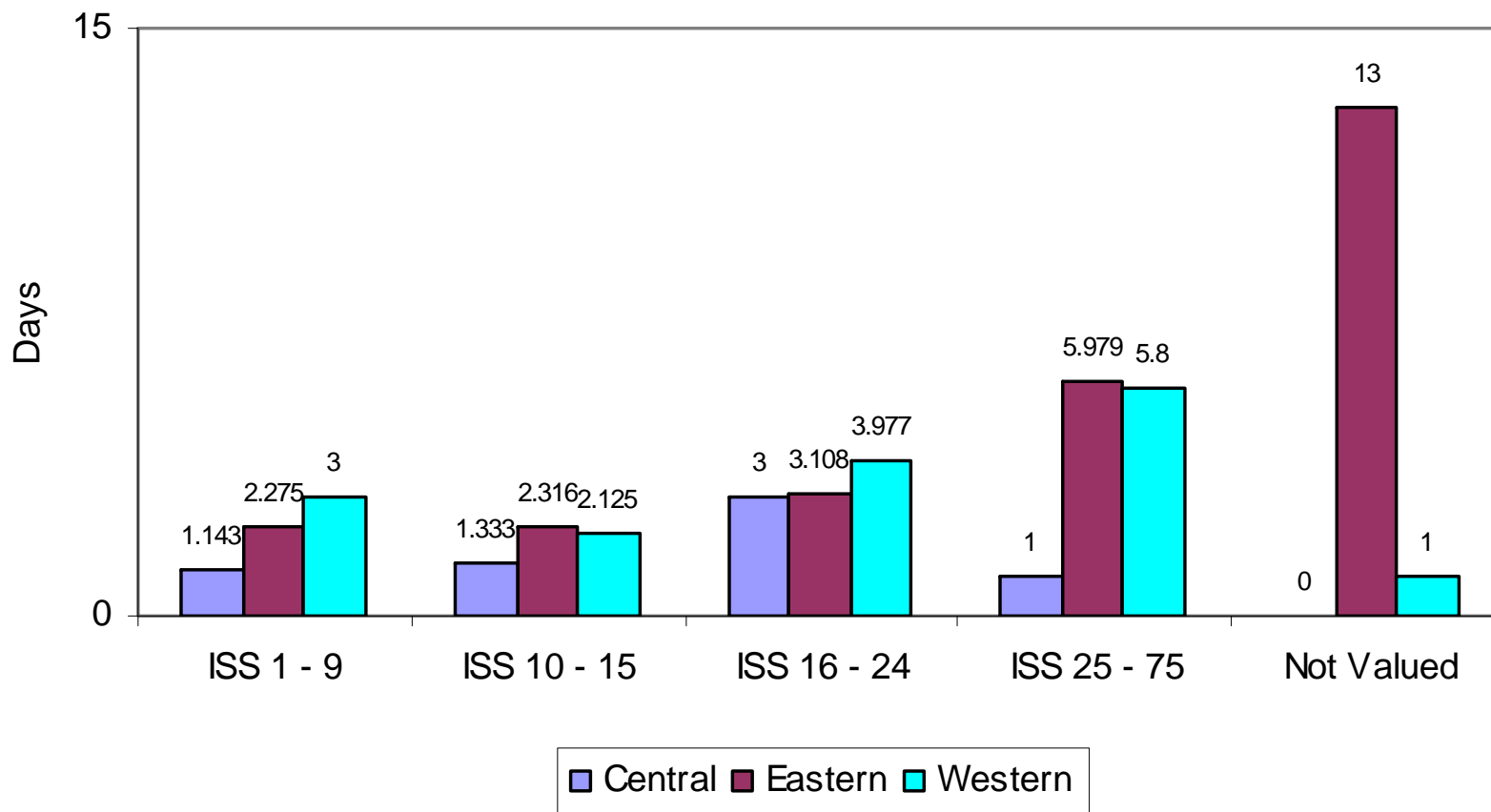
(comparing State and National Trauma Registry)



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MT STCC 1st, 2nd & 3rd Qtrs 2007

Avg. ICU LOS by Region

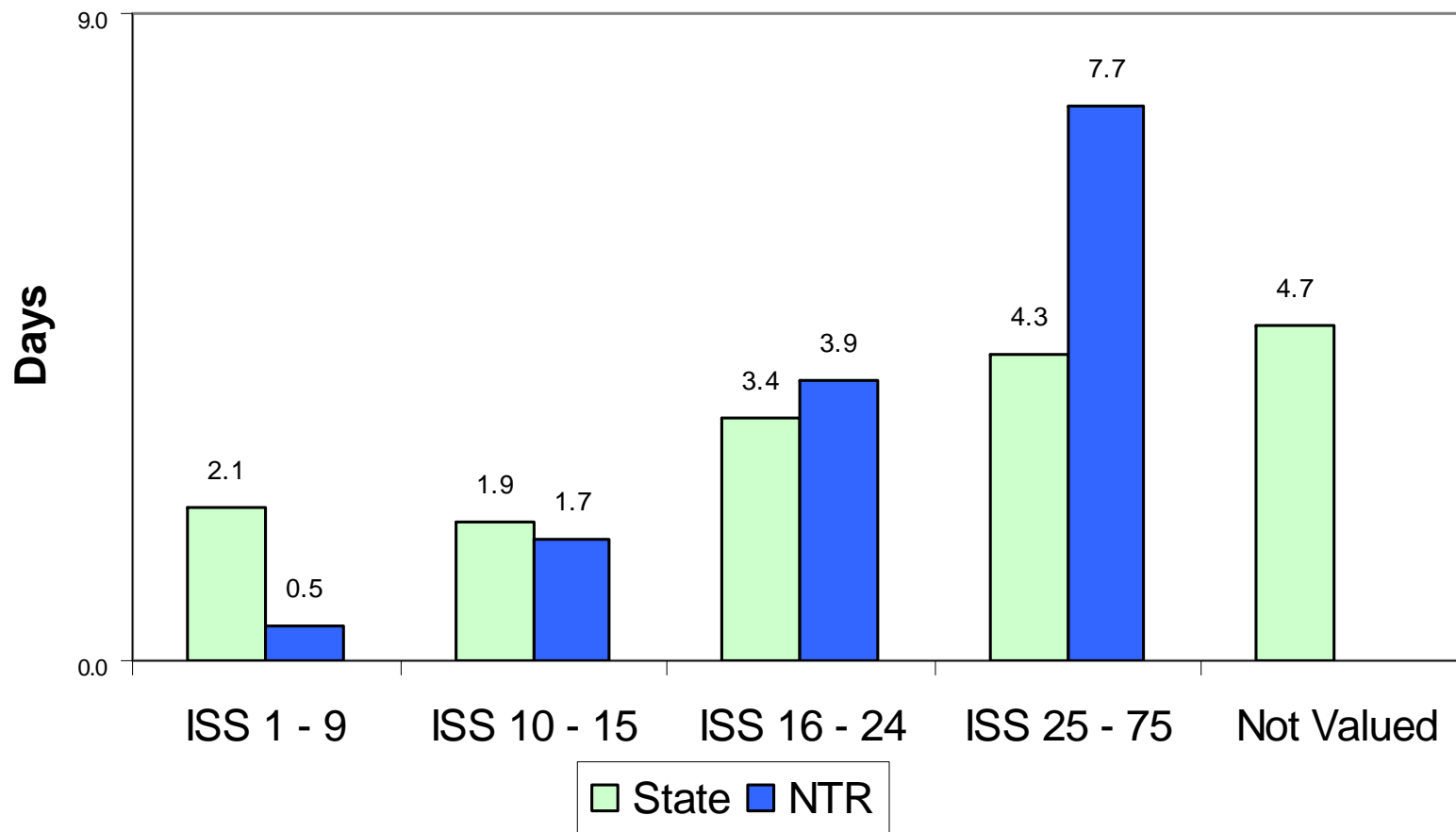


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Avg. ICU LOS

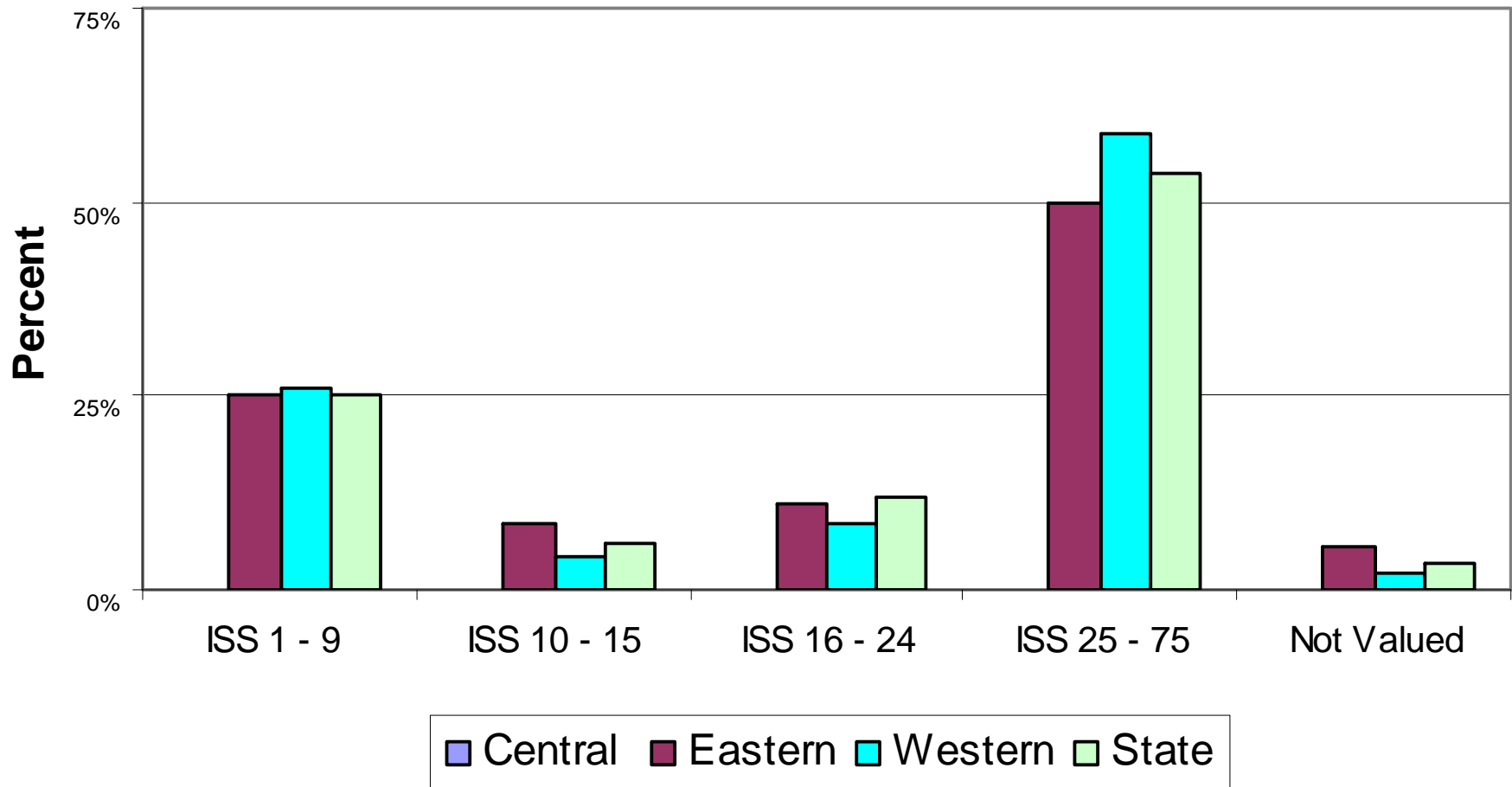
(comparing State and National Trauma Registry)



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MT STCC 1st, 2nd & 3rd Qtrs 2007

Fatalities by ISS



N = 1650

MT STCC 1st, 2nd & 3rd Qtrs 2007

Fatalities (no DOS)

Injury Causes Of Fatalities

N = 84 YTD

MVC – 32 (38%)

Falls – 16 (19%)

MC - 13 (15%)

SI GSW - 5

Pedestrian - 4

Assault/Stabbing - 3

Bicycle vs vehicle - 4

SI Hanging - 1

Anoxia/drowning) - 3

Horse-related - 2

ATV - 1

Fatalities

MVC : 32

+ SB
10 (31%)

- SB
18 (56%)

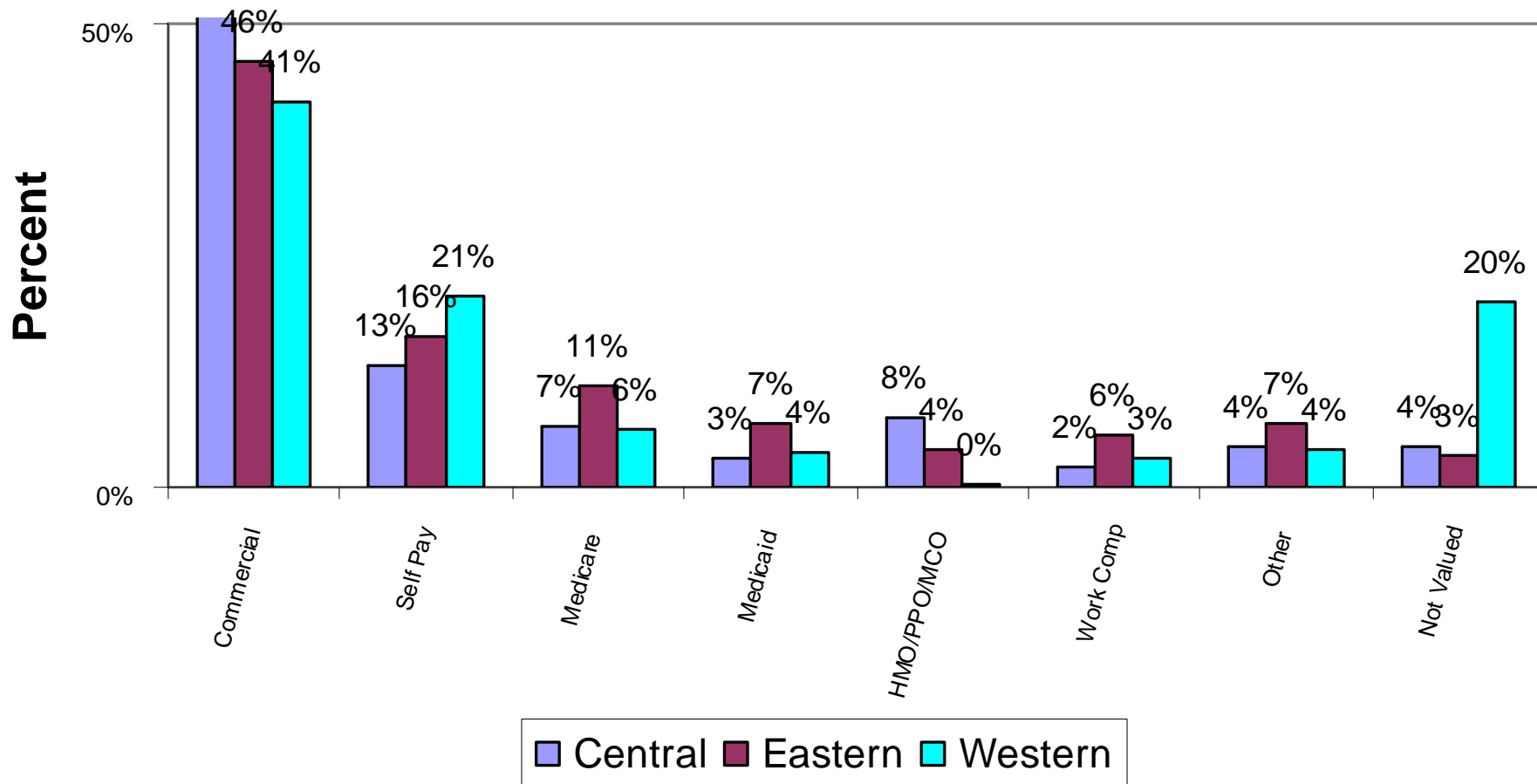
UNK
4

MC : 13

+ H
7

- H
6

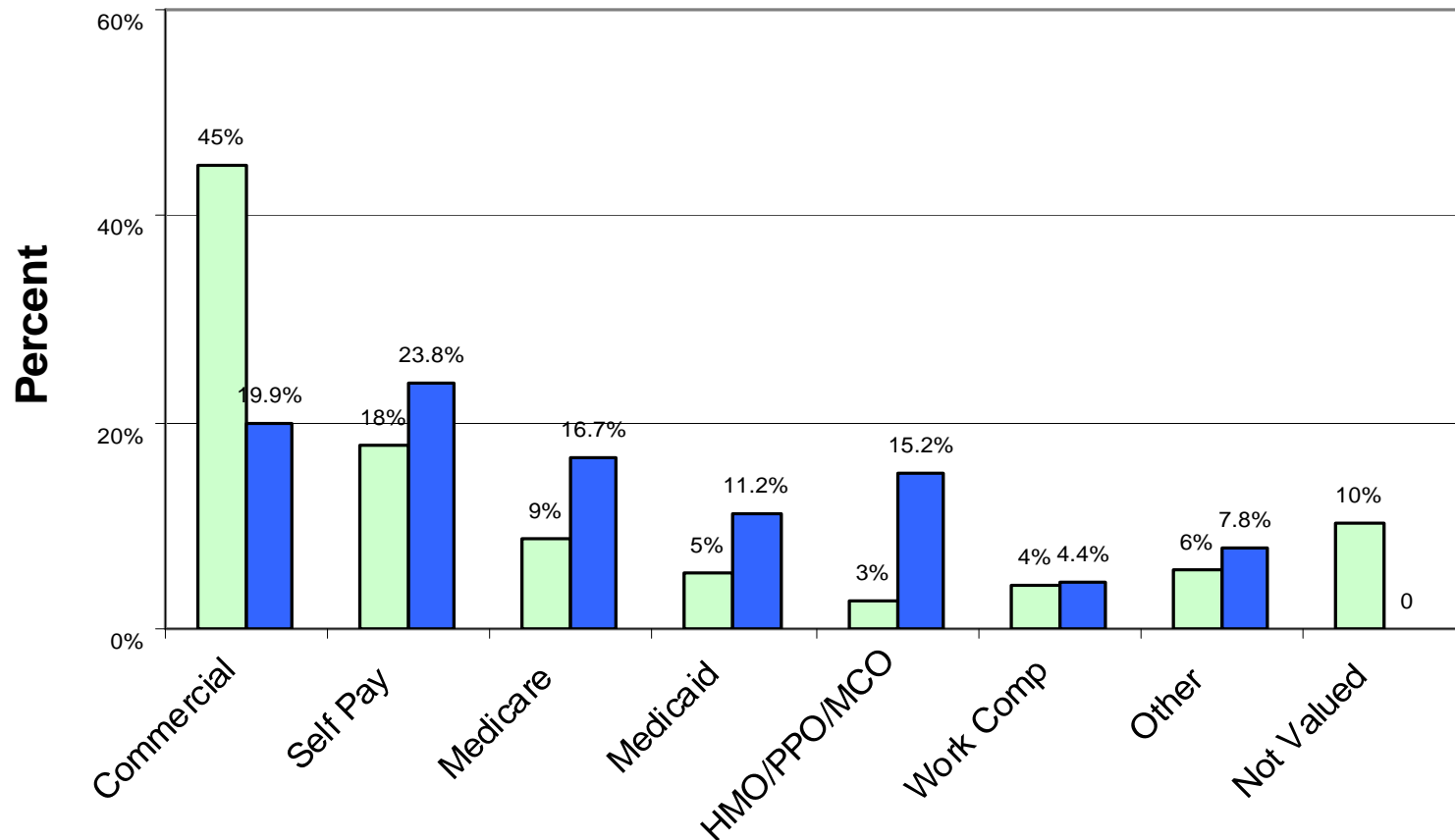
Payors



N = 1650

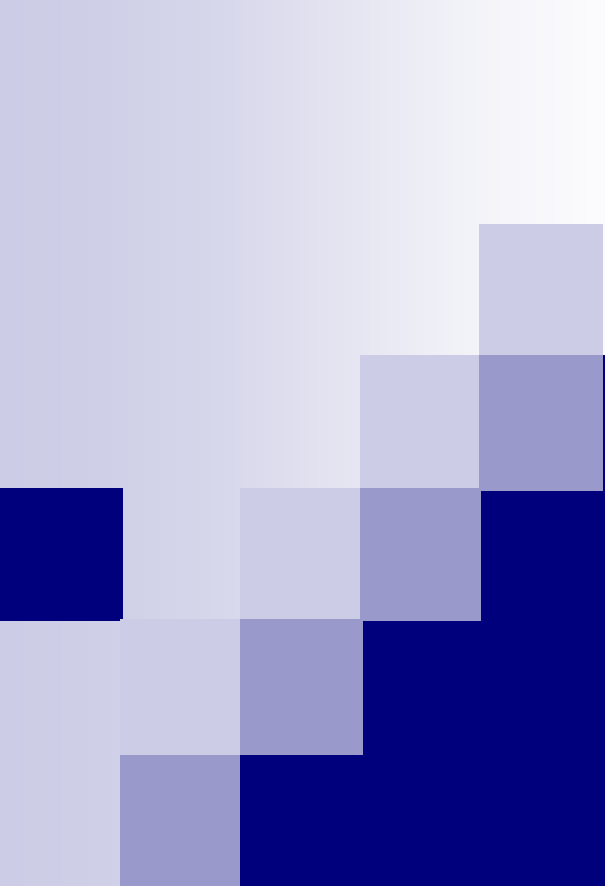
MT STCC 1st, 2nd & 3rd Qtrs 2007

Payors – State vs. NTDB



State NTDB

MT STCC 1st, 2nd & 3rd Qtrs 2007



Performance Indicators

1st – 3rd Quarters 2007

January 1 – June 30, 2007



PI # 1: Trauma Patients Transported per EMS Without Trip Report in the Medical Record

Prehospital Transport: YTD 1159 (70%)

Report available: YTD 848 (73%),

No Report: YTD 296 (25%),

ND: 15 (2%)



PI # 1 cont'd

Ambulance Transports YTD

Central: 72

+ Report: 69, No Report 2

Eastern: 523

+ Report: 379 (72%), No Report: 140 (27%),

Western: 469

+ Report: 318 (68%), No Report 142 (30%),

PI # 1

- Larger services w/more patients have few trends
- MANY smaller services w/few patients w & wo trip reports account for most missing
- Strategy: Focus on small service thru individual facility feedback, add CAH PIN indicators

PI # 2: Transferred Trauma Patients w/ISS ≥ 15 & time at first facility ≥ 6 hrs

5 YTD transfers w/ISS ≥ 15 & time @
facility ≥ 6 hrs

Avg. hours = 32.01 hrs

2 transf. from ED; Avg time; 7.03hr

3 admitted prior to transfer;

Avg time; 48.66hr

**PI #3: Trauma patients with
ISS \geq 15 and ED time \geq 2 hours**

YTD 185 patients (18%)

**□ YTD Average ED time: 225 min
(3.75hr)**

□ YTD Average ISS: 21

**ED Disposition for patient w/ED time
 ≥ 2 hrs & ISS ≥ 15**

YTD

N = 296

ED Disposition

ICU 49%

OR 11%

Floor 16%

Step down 3%

Peds < 1%

Avg. ED time

3.23hr

3.15hr

3.75hr

4.23hr

3.25hr

Transferred to

Acute Care 18%

3.35hr

N = 1650

MT STCC 1st, 2nd & 3rd Qtrs 2007

PI # 4:

**Trauma patients who died
with an ISS ≤ 15**

N= 26 YTD

3rd quarter= 12

Most died in ED (9/12)

**Most “undercoded” due to lack of
complete Dx of injuries in ED**

&/OR relatively minor visible injuries

PI # 5: Patients w/GCS \leq 9 & not intubated

Patients not transferred YTD: 4

1st quarter: 2 patients

#1 Trauma code, Stab wound to chest, GCS 3,
exanguinated, NO ET

#2 Transfer; stab wound/abd, 2nd ED GCS 8,
+BAC
to OR 42", ET in OR

2nd quarter; 2 patients;

#1; Trauma code, MVC multiple pts

BLS per EMS/family present- To ED, efforts
DC'd on arrival, open skull fx, No ET

#2; EMS GCS 13, ED GCS 9, facial injuries
+ ETOH, + cannabis, + benzos

In ED 3hr 52"; to OR for facial repair

"uncooperative", responsive, in restraints

Allowed to gradually awaken,

No ET prior to OR- disp to home after 6 hosp
days, 2 in ICU

3rd quarter -1 pt

16yr male MCC

EMS GCS = 14, ED GCS = 9

**+ETOH, concussion/brief coma, scalp
lac; CT neg**

**“condition improved” No further ED GCS
GCS 15 on arrival ICU**

Home next day w/GCS 15

PI # 5 GCS < 9 & Not Intubated/Transfers

YTD = 3

3rd Quarter: 1pt

13 y F off-road MCC

GCS: EMS/13, ED/9

Head CT neg: awakened to GCS 15 in ED

Adm. Floor

**Transferred to Ped Facility ICU same day due
to**

DI; DC after 2 days w/GCS 15, DI resolved

PI # 5 GCS < 9 & Not Intubated/Transfers

#2;

13 yr MC, EMS GCS/13, ED GCS/9

CT neg, rapid improvement in LOC

GCS 15 on adm to floor (3'25" ED)

**Transferred to Ped. Center later same day
after devel. Diabetes Insipidus, GCS 15**

**Dism to home after 2 days/GCS 15 & DI
resolved**